BANGOR WATER

2023 Water Quality Report

Water Source

Floods Pond in Otis has served as the Bangor Water District's source of supply since 1959. The quality of the water in this pristine lake is so high that it does not require filtration. The District protects over 98% of the land in the Floods Pond watershed through direct ownership and conservation easements that limit activity within the watershed. An ongoing commitment to watershed management protects the source of supply, preserves high quality drinking water, and eliminates the need for a costly filtration plant.

Water Treatment

The water from Floods Pond is treated with advanced ozone and ultraviolet light disinfection systems. Ozone is a powerful oxidizer that removes pathogens and improves the aesthetic qualities of drinking water by removing color, taste, and odor. Chloramines—a combination of chlorine and ammonia—are added as a secondary disinfectant to provide long lasting protection in the distribution system. Treatment also includes pH adjustment for corrosion control, and fluoride addition for dental health.

No Violations in 2023

Bangor Water met or exceeded water quality standards in 2023.

Definitions

AL: Action Level: The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

LRAA: Locational Running Annual Average: A 12-month rolling average of all quarterly samples at specific sampling locations. Calculation of the LRAA may contain data from the previous year.

MCL: Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water.

MCLG: Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health.

mg/L: Milligrams per liter or parts per million (ppm).

MRDL: Maximum Residual Disinfectant Level: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG: Maximum Residual Disinfectant Level Goal: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NTU: Nephelometric Turbidity Unit: A measure of the amount of light scattered by suspended particles in water.

pCi/L: Picocuries per liter: A measure of radioactivity.

RAA: Running Annual Average: A 12-month rolling average of all monthly or quarterly samples at all locations. Calculation of the RAA may contain data from the previous year.

µg/L: Micrograms per liter or parts per billion (ppb).

WATER TEST RESULTS - PRIMARY STANDARDS

Contaminant	MCLG	MCL	Result[1]	Source
Microbiological				
Coliform[2]	0 Positive	1 Positive/mo.	1 Positive, August 2023	Naturally present in the environment
Inorganics				
Barium (mg/L)	2	2	0.0013	Erosion of natural deposits
Fluoride (mg/L)[3]	4	4	0.78	Water additive which promotes strong teeth; erosion of natural deposits
Radionuclides				
Combined Radium (-226 & -228) (pCi/L)[4]	0	5	0.63	Erosion of natural deposits
Combined Uranium (µg/L)	0	30	0.56	Erosion of natural deposits
Radium-226 (pCi/l)[4]	0	5	0.0666	Erosion of natural deposits
Radium-228 (pCi/l)[4]	0	5	0.563	Erosion of natural deposits
Lead/Copper				
Copper (mg/L) 90th Percentile[5]	1.3	AL = 1.3	0.167	Corrosion of household plumbing systems
Lead (µg/L) 90th Percentile[5]	0	AL = 15	3.66	Corrosion of household plumbing systems
Chlorine Residual				
Chlorine Residual (mg/L)	MRDLG = 4	MRDL = 4	2.00-3.31	By-product of drinking water chlorination
Turbidity (Highest Reading, 12/23/2022)				
Turbidity (NTU)	N/A	5	1.16 (highest monthly reading)	Soil runoff
Disinfection Byproducts				
Total Haloacetic Acids, HAA5 (µg/L)[6]	**MCLG**	**MCL**	**LRAA**	**Range**
1123 Broadway	0	60	23.5	13—34
450 Essex St.			23.25	12—34
614 State St.			23.5	12—34
Griffin Rd.			21.75	15—30
Total Trihalomethanes, TTHM (µg/L)[6]	**MCLG**	**MCL**	**LRAA**	**Range**
1123 Broadway	0	80	4.43	0.7—9.6
450 Essex St.			4.38	0.6—10
614 State St.			4.35	0.5—9.7
Griffin Rd.			5.93	1.2—14

1123 Broadway	0	60	23.5	13—34	By-product of drinking water chlorination
450 Essex St.			23.25	12—34	
614 State St.			23.5	12—34	
Griffin Rd.			21.75	15—30	

1123 Broadway	0	80	4.43	0.7—9.6	By-product of drinking water chlorination
450 Essex St.			4.38	0.6—10	
614 State St.			4.35	0.5—9.7	
Griffin Rd.			5.93	1.2—14	

All other regulated contaminants were below detection levels

Notes:

1) All results are from 2023 unless otherwise indicated.
2) Total Coliform Bacteria: Reported as the highest monthly number of positive samples, for water systems that take less than 40 samples per month.
3) Fluoride: For those systems that fluoridate, fluoride levels must be maintained between 0.5 to 1.2 ppm. The optimum level is 0.7 ppm.
4) The results shown for radium-226, radium-228 and combined uranium were obtained in 2020.
5) Lead/Copper: Action levels (AL) are measured at consumer's tap. 90% of the tests must be equal to or below the action level. Result was obtained in 2022.
6) TTHM/HAA5: Total Trihalomethanes and Haloacetic Acids (TTHM and HAA5) are formed as a by-product of drinking water chlorination. This chemical reaction occurs when chlorine combines with naturally occurring organic matter in water. Compliance is based on running annual average.

Secondary Standards

Secondary standards are the non-regulated parameters monitored for aesthetic concerns and do not present a health risk. Secondary contaminants that were detected are in the table to the right.

WATER TEST RESULTS - SECONDARY STANDARDS	
Contaminant	Result
Chloride (mg/L)	6
Magnesium (mg/L)	0.4
Manganese (mg/L)	0.0037
Sodium (mg/L)	15
Sulfate (mg/L)	2

Source Water Assessment

The sources of drinking water include rivers, lakes, ponds, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and radioactive material and can pick up substances resulting from human or animal activity. Bangor Water makes every effort to protect the Floods Pond watershed to minimize potential sources of contamination to your drinking water. The Maine Drinking Water Program (DWP) has evaluated all public water supplies as part of the Source Water Assessment Program (SWAP). The assessments included geology, hydrology, land uses, water testing information, and the extent of land ownership or protection by local ordinance to see how likely our drinking water source is to being contaminated by human activities in the future. The DWP's report on Floods Pond concludes that it is at **low** risk of contamination. Assessment results are available at Bangor Water's business office, or through the Maine DWP.

Health Information

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and can also come from gas stations, urban runoff, and septic systems.
Radioactive Contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791) or at the following link:

https://www.epa.gov/ccr/forms/contact-us-about-consumer-confidence-reports

Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Bangor Water is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at the following link:

http://www.epa.gov/safewater/lead

Unregulated Contaminants Monitoring

Unregulated contaminants are those for which U.S. EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of these contaminants in drinking water and whether future regulation is warranted. In 2023 we participated in the fifth round of the Unregulated Contaminant Monitoring Rule (UCMR 5). We had **no detections** of any of the contaminants in this round of testing

Waiver Information

In 2023, our system was granted a 'Synthetic Organics Waiver.' This is a three year exemption from the monitoring/reporting requirements for the following industrial chemical(s): TOXAPHENE/CHLORDANE/PCB, HERBICIDES, CARBAMATE PESTICIDES, SEMIVOLATILE ORGANICS. This waiver was granted due to the absence of these potential sources of contamination within a half mile radius of the water source(s).

Contact Us

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